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## Specification Guide

Engineered in Germany Proven at Sea

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#### Dual Crankshaft Design

The patented dual crankshaft design eliminates the rolling moment and most of the inertia forces and thus strong vibrations typically found in conventional diesel engines.

#### 2 Automatic Thermomangement

The Automatic Thermo-Management System manages engine temperatures and further reduces the risk of engine downtime due to overheating.

#### Aluminium Cylinder Block

The cylinder block of the engine is an Aluminium design. A closed deck with pressed-in dry cast iron cylinder sleeves, this feature optimises servicability and protection.

#### Bosch Common Rail Fuel System

The Bosch Common Rail fuel system enables quick and direct injection of fuel into the engine cylinders. The system delivers greater power and efficiency whilst minimising generation of noise, vibration and smoke.

#### Optimised Oil Cooling

Our lower unit features a unique oil cooling system. Within the oil pan, we have included internal fins. This helps us optimise the oil cooling process.



## **Technical Specifications**

Power	36,8 kW/50 hp at 3.500 - 4.000 min-1
Max. Torque	111 Nm at 2250 - 3000 min-1
Engine Type	Turbo-charged parallel twin diesel engine
Balance	Dual counter-rotating crankshafts
Swept Volume	804 ccm
Bore x Stroke	80 x 80 mm
No. Cylinders	2 In-Line, twin
Intake	Water cooled turbo charger and charge air cooling
Power Head Lubrication	Pressure lubrication (engine oil volume 6,5 litres, 10W-40, ACEA specification: E7, E4: API Specification CF-4; at ambient temperatures of < 0 °C, 5W-30, ACEA specification: E4: API Specification CF-4; at ambient temperatures of > 0 °C
Fuel	Diesel (Low Sulphur)
Injection	Bosch common rail direct injection
Battery	Minimum 75Ah (Battery cables must have the right length vs diameter. Diesel need bigger diameter.)
Alternator	Standard 12 V/300 W
Cooling	Neander Active Thermo-Management System (ATMS)
Exhaust	Integrated underwater thru-hub propeller
Steering	Tiller / remote control, optional
Suspension	Silent block controlled compression and traction
Trim	Power trim
Shift	Mechanical - dog-clutch gearing
Transmission	Ratio 13/27 (2.07:1)
Available Shaft	Versions 20" (L) and 25" (XL)
Standard Propeller Type	3-blade with built in damper
Weight	175kg (dry)

## **Technical Drawings**



Engine fully tilted up with tiller handle
1A 951 (L) / 1062 (XL), 1B 199 (L) / 260 (XL)



2A 951 (L) / 1062 (XL), 2B 199 (L) / 260 (XL)





**3A** 1534 (L) / 1661 (XL), **3B** 878 (L) / 1005 (XL), **3C** 509 (L) / 636 (XL)

4 Engine in vertical position without tiller handle
4A 1534 (L) / 1661 (XL), 4B 878 (L) / 1005 (XL), 4C 509 (L) / 636 (XL)









## **Rigging Schematic**



## **Performance Comparison**



**Torque Comparison** 

**RPM** 







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